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ABSTRACT

A total of 20 infants 8 months of age were videotaped in dyads with each parent during 10 minutes of free play in a laboratory setting, to investigate reciprocal behavior among parents and their infants. Questionnaire data on parents' caretaking involvement were also collected. Findings indicated that mothers and fathers did not differ on the dimensions of contingent behavior, anti-contingent behavior, initiation behavior, "maternal" (social, toy-oriented) play style, or "paternal" (physical) play style. However, caretaking involvement, as measured by the amount of time parents individually spent with their infants, was negatively related to mothers' paternal play style and positively related to fathers' paternal play style. In addition, compared to female infants, male infants were the objects of more contingent, less initiating, and less paternal behavior. It is concluded that findings indicate the importance of focusing on similarities between maternal and paternal behavior and reveal precursors in infancy of sex role socialization. (RH)

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MOTHER-INFANT AND FATHER-INFANT INTERACTION BEHAVIOR

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ABSTRACT

THIS STUDY FOCUSED ON RECIPROCAL PARENT-INFANT BEHAVIOR, AN IMPORTANT FACTOR IN THE COGNITIVE AND EMOTIONAL DEVELOPMENT OF THE INFANT. TWENTY 8-MONTH-OLD CHILDREN WERE VIDEOTAPED ALONE WITH EACH PARENT FOR 10 MINUTES OF FREE PLAY IN A LABORATORY SETTING. QUESTIONNAIRE DATA ON CARETAKING INVOLVEMENT WERE ALSO COLLECTED. MOTHERS AND FATHERS DID NOT DIFFER ON THE DIMENSIONS OF CONTINGENT BEHAVIOR, ANTI-CONTINGENT BEHAVIOR, INITIATION BEHAVIOR, "MATERNAL" (SOCIAL, TOY-ORIENTED) PLAY STYLE OR "PATERNAL" (PHYSICAL) PLAY STYLE. HOWEVER, CARETAKING INVOLVEMENT, AS MEASURED BY THE AMOUNT OF TIME PARENTS SPENT ALONE WITH THEIR INFANTS, WAS NEGATIVELY RELATED TO MOTHERS' PATERNAL PLAY STYLE AND POSITIVELY RELATED TO FATHERS' PATERNAL PLAY STYLE. IN ADDITION, MALE INFANTS WERE THE OBJECTS OF MORE CONTINGENT, LESS INITIATING AND LESS PATERNAL BEHAVIOR. THE STUDY POINTS OUR THE IMPORTANCE OF FOCUSING ON SIMILARITIES BETWEEN MATERNAL AND PATERNAL BEHAVIOR AND REVEALS PRECURSORS IN INFANCY OF SEX-ROLE SOCIALIZATION.

AIMS

The primary focus in this study was on the ability of mothers and fathers to be contingently responsive to their infants. Contingency enables the infant to learn that his or her behavior has consequences, thus facilitating a sense of control over the world and fostering greater exploration of the environment (Belsky, Lerner & Spanier, 1984; Lewis & Goldberg, 1969). It also forms the basis for an empathetic emotional interaction between caregiver and infant, the foundation for healthy interpersonal relations (Greenspan & Lieberman, 1980). The study was thus designed to go beyond examination of the more frequently studied stylistic differences in maternal and paternal play behavior to explore the possible differential effects mothers and fathers have on child development. In addition, the relationship of caretaking involvement and infant gender to parental behavior was considered. Consistent with earlier findings, mothers were predicted to be more contingent, social, and toy-oriented, and less physical and intiating than fathers in their play (Belsky, Gilstrap & Rovine, 1984; Clarke-Stewart, 1978; Crawley & Sherrod, 1984; Lamb, 1980, 1981; Power, 1985; Power & Parke, 1983; Yogman, 1981). Fathers with greater caretaking involvement were expected to be more similar to mothers than more traditional fathers, but to still differ significantly from mothers (Field, 1978 ; Lamb et al., 1982). While differences based on the sex of the infant were expected to emerge, the direction of such effects was not predicted.

METHOD

Twenty families and their 8-month-old children were recruited by newspaper advertising. Eight-month-old children were selected, because infants of this age engage in significantly more signalling behavior than younger infants but still require a great deal of care. The subjects were primarily white middle- and upper-middle-class families. Two-thirds of the mothers worked full-time or part-time. However, the families maintained fairly traditional roles; most of the mothers were primary caretakers.

Each parent was videotaped alone with his or her infant for 10 minutes of free play in a laboratory playroom. Parents were instructed to "play with the baby as you would at home." The data were analyzed using the Greenspan-Lieberman Observational System (GLOS: Greenspan & Lieberman, 1980). The GLOS examines interactions from a developmental and psychoanalytic perspective. It measures a wide range of behaviors as well as whether behaviors are contingent to the behavior of the other member of the dyad. Five dependent measures were developed from the GLOS: contingent behavior, anti-contingent behavior, "maternal" (social, toy-oriented) play style, "paternal" (physical) play style and initiation behavior. In addition, parents each completed a questionnaire which yielded two measures: dyad time (the number of hours per week spent alone with the infant) and psychological responsibility (degree of involvement in specific childcare tasks that required parent initiative and planning).

RESULTS

A 2 X 2 MANOVA (PARENT SEX X INFANT SEX) WITH REPEATED MEASURES ON THE SEX-OF-PARENT FACTOR WAS CONDUCTED FOR THE FIVE TYPES OF INTERACTION BEHAVIOR: CONTINGENT, ANTI-CONTINGENT, MATERNAL PLAY STYLE, PATERNAL PLAY STYLE AND INITIATION. THERE WERE NO SIGNIFICANT DIFFERENCES BETWEEN MOTHERS AND FATHERS ON ANY OF THE DEPENDENT MEASURES. HOWEVER, ALL PARENTS TREATED MALE INFANTS DIFFERENTLY THAN FEMALE INFANTS. MOTHERS AND FATHERS WERE SIGNIFICANTLY MORE CONTINGENT, LESS PATERNAL AND LESS INITIATING WITH BOYS THAN GIRLS. NO SIGNIFICANT INTERACTIONS BETWEEN PARENT GENDER AND INFANT GENDER WERE FOUND (SEE TABLE 1).

TO DETERMINE THE INFLUENCE OF CARETAKING INVOLVEMENT ON THE MEASURES OF INTERACTION BEHAVIOR, SEPARATE MULTIPLE REGRESSION ANALYSES FOR DYAD TIME AND PSYCHOLOGICAL RESPONSIBILITY WERE PERFORMED. DYAD TIME WAS SIGNIFICANTLY RELATED TO PATERNAL PLAY STYLE (SEE TABLE 2). FATHERS WHO SPENT MORE TIME ALONE WITH THEIR INFANTS WERE MORE PATERNAL (PHYSICAL) IN THEIR PLAY WHILE MOTHERS WHO SPENT MORE TIME ALONE WITH THEIR INFANTS EXHIBITED A LESS PATERNAL PLAY STYLE. THUS INCREASED DYAD TIME WAS RELATED TO MORE STEREOTYPED BEHAVIOR. THERE WAS NO SIGNIFICANT RELATIONSHIP BETWEEN DYAD TIME AND ANY OTHER DEPENDENT MEASURE OR BETWEEN PSYCHOLOGICAL RESPONSIBILITY AND ANY DEPENDENT MEASURE.

Table 1

ANALYSIS OF PARENTAL BEHAVIOR

	% Cont.	% Anti-cont.	Mat.Play (freq.)	Pat.Play (freq.)	Init.Ratio (Pt. to Inf.)
Mothers					
Girls					
Mean	.17	.04	21	18.83	1.41
S.D.	.109	.029	5.86	12.605	.698
Boys					
Mean	.32	.02	19	9.37	.57
S.D.	.161	.022	8.315	6.323	.348
Fathers					
Girls					
Mean	.17	.04	19.67	17.75	1.09
S.D.	.11	.052	7.463	7.806	.595
Boys					
Mean	.24	.03	19.5	12.87	.87
S.D.	.097	.051	11.94	12.12	.7
MANOVAs					
Infant Sex					
F	6.43	1.84	.16	4.71	6.8
$p <$	.03	...	...	.05	.02
Parent Sex					
F	.87	.16	.06	.06	.14
$p <$	...	...	...	...	...
Parent Sex X Infant Sex					
F	1.09	.26	.12	.49	2.65
$p <$	...	...	...	...	...

Table 2

PROPORTION OF VARIABILITY IN DEPENDENT MEASURES EXPLAINED BY DYAD TIME AND PSYCHOLOGICAL RESPONSIBILITY (R^2)

	Dyad Time	Psych. Respons.
Contingency	.03	.09
Anti-contingency	.05	.01
Maternal Play Style	.05	.02
Paternal Play Style	.34*	.08
Initiation	.14	.03

*$p < .002$

DISCUSSION

THE RESULTS DID NOT SUPPORT THE HYPOTHESES OF THE STUDY. MOTHERS AND FATHERS WERE MORE SIMILAR THAN DIFFERENT, AND CARE-TAKING INVOLVEMENT WAS NOT RELATED TO MOST BEHAVIORS. HOWEVER, THE FINDINGS CONCERNING INFANT GENDER WERE REVEALING AND CONSISTENT WITH RESEARCH ON SEX-ROLE SOCIALIZATION.

THERE ARE SEVERAL POSSIBLE EXPLANATIONS FOR THE FINDING THAT MOTHERS AND FATHERS DID NOT DIFFER IN THEIR BEHAVIOR. CONTINGENT RESPONSIVENESS HAS NOT BEEN AS FREQUENTLY STUDIED AS OTHER ASPECTS OF PLAY BEHAVIOR, AND THE GLOS, A REFINED AND UNIQUE INSTRUMENT, MAY HAVE REVEALED A TRUER COMPARISON THAN WAS POSSIBLE WITH PREVIOUS MEASURES. HOWEVER, THE FAILURE TO FIND THE MORE FREQUENTLY OBSERVED STYLISTIC DIFFERENCES IS LESS EASILY EXPLAINED. ONE FACTOR MAY BE THE REPRESENTATIVENESS OF THE SAMPLE. SUBJECTS MADE THE INITIAL CONTACT, WERE NOT PAID OR OFFERED TREATMENT AND CAME IN ON WEEKDAYS FOR APPOINTMENTS THAT OFTEN HAD TO BE RESCHEDULED AS A RESULT OF BAD WEATHER OR CHILD ILLNESS. THEY WERE UNUSUALLY FLEXIBLE AND INVESTED IN PARTICIPATING IN THE RESEARCH. DESPITE THE APPARENTLY TRADITIONAL NATURE OF THE GROUP, THE FATHERS MAY HAVE BEEN ATYPICAL. ANOTHER FACTOR IS THE INFLUENCE OF THE EXPERIMENTAL SETTING. THE LABORATORY PERMITTED MORE CONTROL, BUT MAY HAVE OBSCURED DIFFERENCES MORE APPARENT AT HOME. THE NOTION OF A DISTINCTION BETWEEN COMPETENCE AND PERFORMANCE IN FATHERS HAS BEEN SUGGESTED BY THE LITERATURE (BELSKY, GILSTRAP & ROVINE, 1984; LEWIS & WEINRAUB, 1976; PARKE & TINSLEY, 1981). THE PREMISE IS THAT FATHERS, WHILE CAPABLE OF INTERACTING COMPETENTLY WITH THEIR

YOUNG CHILDREN, PARTICULARLY IN EXPERIMENTALLY CONTROLLED SITUATIONS WHERE THERE IS LITTLE ELSE TO DO, ARE STRIKINGLY LESS INVOLVED WITH THEIR INFANTS WHEN OBSERVED UNDER NATURALISTIC CONDITIONS THAT PROVIDE THE OPPORTUNITY TO STUDY PERFORMANCE. THE LACK OF DIFFERENCES OBSERVED MAY BE RELATED TO THIS DISTINCTION.

THE INFANT GENDER EFFECTS REVEALED CONTRADICT STUDIES OF MATERNAL AND PATERNAL BEHAVIOR THAT HAVE FOUND THAT MOTHERS AND FATHERS INTERACT DIFFERENTLY WITH SAME-SEX AND OPPOSITE-SEX INFANTS (PARKE & O'LEARY, 1976; PARKE & SAWIN, 1980; POWER, 1981; SNOW ET AL., 1983; WEINRAUB & FRANKEL, 1977). HOWEVER, THE LITERATURE ON SEX-ROLE SOCIALIZATION SUGGESTS THAT MALE INFANTS AND CHILDREN ARE ENCOURAGED TO EXPLORE MORE AND ARE SUPERVISED LESS THAN FEMALE INFANTS AND CHILDREN (BLOCK, 1983; POWER & PARKE, 1983). THE FINDINGS IN THIS STUDY OF MORE CONTINGENT AND LESS INITIATION BEHAVIOR WITH MALE INFANTS IS THUS NOT SURPRISING. PARENTS APPEARED TO PERMIT MALE INFANTS TO DIRECT THE AGENDA MORE. SIMILARLY, THE FINDINGS OF GREATER PHYSICAL CONTACT WITH FEMALE INFANTS SUGGEST THAT PARENTS MAY HAVE BEEN KEEPING THEM IN CLOSER PROXIMITY, AS WELL AS DIRECTING THEM MORE. CONSISTENT WITH THE OVERALL SIMILARITIES IN BEHAVIOR OBSERVED IN THIS STUDY, FATHERS AND MOTHERS ALSO EXHIBITED SIMILAR BEHAVIOR AS A FUNCTION OF THE INFANT'S SEX. THE RELATIONSHIP BETWEEN INCREASED DYAD TIME AND MORE STEREOTYPED PLAY BEHAVIOR IS PUZZLING, BUT MAY HAVE REFLECTED SOME ASPECT OF CHILDREARING NOT TAPPED BY THE QUESTIONNAIRE.

CONCLUSIONS

This study points out the importance of focusing on similarities rather than differences in maternal and paternal interaction behavior. This is particularly true in light of the findings concerning contingent responsiveness, a critical factor in development. The failure to find differences has interesting implications for the changes in parenting roles currently taking place in American culture.

The infant gender effects suggest potential precursors of sex-role socialization in infancy. How parents respond to their infants as a function of the infant's sex appears to originate in a source powerful enough to make a difference even in mothers and fathers who were very similar to one another in their parenting styles and did not exhibit the more stereotyped interaction behavior. Clearly, a fuller understanding of the nature of the relationship between sex-typing and parenting behavior awaits further research.

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